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NEW RACES IN THE GENERA OF VIREO AND BUARREMON FROM SINALOA.

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Two new races have appeared in the collections from Sinaloa and are herewith described.

For the loan of critical specimens, my acknowledgments are gratefully made to Mr. John T. Zimmer and the American Museum of Natural History, to Dr. Herbert Friedmann and the Smithsonian Institution, to Dr. Harry C. Oberholser and the Biological Survey, and to Mr. James L. Peters and the Museum of Comparative Zoology.

Vireo pallens paluster, subsp. nov.

SINALOA MANGROVE VIREO.

. Type.—Male adult in full breeding condition; number 8445, collection of Robert T. Moore; Isla Las Tunas, on the gulf coast of northwestern Sinaloa, Mexico; May 9, 1934; collected by Chester C. Lamb.

Subspecific characters.—Differs from Vireo pallens ochraceus Salvin of western Guatemala in being duller, more brownish yellow below, grayer (less greenish) above; bill heavier, longer and deeper.

From the forms on the east coast of Central America, *paluster* differs unmistakably in its larger size. With *pallens pallens*, whose range is south of that of *ochraceus*, there can be no confusion, because the underparts of *paluster* are Naples Yellow,¹ not dull white as in *p. pallens*.

Range.—Mangrove swamps of the coast of Sinaloa, from about latitude 25° south to Mazatlan and probably as far as Nayarit. A single specimen from San Blas in the British Museum has not been compared, but presumably belongs to the new race.

Specimens examined.—V. p. paluster, Sinaloa, $1\sigma^{7}$ (Type), 1φ Isla Las Tunas, $1\sigma^{7}$ Mazatlan. V. p. ochraceus, Guatemala, $6\sigma^{7}$, 2φ San Jose, 1φ Ocos. V. p. semiflavus, British Honduras, $1\sigma^{7}$ Yecacos Lagoon, $1\sigma^{7}$ Manatee District; Mexico, $5\sigma^{7}$ Jama, Campeche.

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¹Names of colors in this paper, when capitalized, are taken from Ridgway's "Color Standards and Color Nomemclature," 1912.

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Remarks.—Ridgway (Birds of N. & M. Am., Pt. 3, p. 193, footnote d), noticed the larger size of the bill of the single specimen from Mazatlan, taken by A. J. Grayson on June 16, 1862. The two specimens of the Moore collection show this character more markedly, in fact, the bill is not only larger but of different proportions, being deeper than it is longer than true ochraceus.

AVERAGE MEASUREMENTS OF Vireo pallens paluster and V. p. ochraceus.

MALES. 1 ad. (Type) Sinaloa, <i>paluster</i> 6 sp. Guatemala, <i>ochraceus</i>	WING. 59.0 57.7	TAIL. 46.4 43.9	EXPOSED CULMEN. 11.7 10.25	DEPTH CULMEN. 4.5 3.9
FEMALES. 1 ad. Sinaloa, <i>paluster</i> 3 ads. Guatemala, <i>ochraceus</i>	$56.8 \\ 56.7$	45.7 42.4	11.1 10.0	4.3 3.9

In the above measurements the exposed culmen is measured from the point where the tips of the feathers of the forehead fail to hide the culmen.

Buarremon virenticeps verecundus, subsp. nov.

DUSKY BUARREMON.

Type.—Male adult; number 12382, collection of Robert T. Moore; Rancho Batel, 5 miles due north of Santa Lucia, S. E. Sinaloa, Mexico; altitude 5650 feet; Nov. 15, 1934; collected by Chester C. Lamb.

Subspecific characters.—Differs from Buarremon virenticeps Bonaparte of southcentral Mexico in having the gray of sides darker and much more extensive, largely replacing the Olive-Green on the flanks and extending across the breast, almost to the exclusion of the white; white of median underparts much more restricted; undertail coverts darker green; size smaller, particularly bill; tail relatively shorter, being approximately equal to wing instead of from eight to ten per cent longer.

Range.—Rancho Batel in the Transition Zone at the top of the mountain range forming the boundary line between southeastern Sinaloa and Durango.

It is apparently a very rare bird in Sinaloa, as neither Chester C. Lamb nor the author has secured any other specimens in four years of collecting in Sinaloa.

Specimens examined.—B. v. verecundus, Sinaloa, $1 \triangleleft 3$, $1 \heartsuit$ Rancho Batel. B. v. virenticeps, Mexico, $2 \triangleleft 3$ Desierto de Leones, $1 \triangleleft 3$, $1 \heartsuit$ Temascaltepec, $1 \heartsuit$ La Venta. B. assimilis assimilis, Ecuador, $1 \triangleleft 3$ Alas Pungo, $1 \heartsuit$ Papallacta, 1 im. \heartsuit Cuyuja, $1 \triangleleft 3$, $1 \heartsuit$ Cuenca.

Remarks.—This seems to be the first record of the species *virenticeps* or the genus *Buarremon* in northwestern Mexico, the nearest approach hitherto being apparently a record from San Sebastian, Jalisco, referred to by Ridgway. J. H. Batty, during nearly a year of collecting in the State of Durango and another year in Sinaloa not far from the type locality, did not secure a single specimen.

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The characters of the species *virenticeps* are very close to *assimilis*. The only real difference between the two is that the gray of the central median stripe on the head in *assimilis* is replaced by Olive-Green in *virenticeps*.

As verecundus is a high mountain form and none of the early collectors entered the mountains of Sinaloa, it is almost certain that Bonaparte's Type of virenticeps came from southcentral Mexico. I therefore designate the type locality as Desierto de Leones, near Mexico City, Mexico, as being a probable area from which the Type could have been secured.

The great difference in the length of the tail would be still greater, were it not for the fact that the Rancho Batel birds are in fresh plumage, whereas the southcentral Mexican birds have both wings and tail badly worn.

AVERAGE MEASUREMENTS OF Buarremon virenticeps verecundus AND B. v. virenticeps.

			EXPOSED
MALES.	WING.	TAIL.	CULMEN.
1 ad. (Type) Sinaloa, verecundus		83.0	14.3
3 ads. Mexico, virenticeps	. 84.1	93.3	15.9
FEMALES.			
1 ad. Sinaloa, verecundus	. 77.4	80.7	15.3
2 ads. Mexico, virenticeps	. 81.2	83.4	15.7